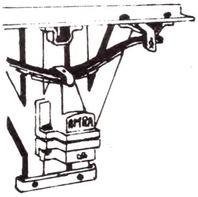

JOURNAL BOX

10/75

EDITORIAL.

I found the following thought provoking poem recently, and offer it to you all for consideration.

I watched them tearing a building down,
A gang of men in a busy town;
With a heave-ho and a lusty yell,
They swung a beam and a sidewalk fell.

I asked the foreman, "Are these men skilled
Like the men you hire if you want to build?"
He gave a laugh and said,
"No indeed, just common labour is all I need;
I can easily wreck, in a day or two,
What builders have taken a year to do.

I thought to myself as I went my way,
Which of these roles do I have to play?
Am I a builder who works with care,
Measuring my life by the rule and square;
Am I shaping my deeds to a well made plan,
Patiently doing the best I can;
Or am I a wrecker who walks the town,
Content with the labour of tearing down?

On behalf of myself and the Federal Committee let me wish you all a Merry Christmas and a prosperous New Year.

Rex Little.

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ON THE COVER.

V.R. Railmotor on AMRA (Vic.) excursion to Wonthaggi.

Photo by R. Little.

Volume 24. Issue 116.

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Credits.

Editor Rex Little
P.O. Box 46,
Nunawading, Vic., 3131

Publisher Maurie McKinnon,
26 Bondi Avenue
Frankston Vic., 3199

Artwork Bill Morehouse

Cover Design Heather Gregg

Typing Dot Treseder

Printing Sentinel Times Publishing
8 Radovik St.,
Korumburra, Vic., 3950

Federal Secretary Norm Read
3 Augusta St.,
Strathfield, N.S.W., 2135

Federal Treasurer Keith Robinson
26 Lilac St.,
Punchbowl, N.S.W., 2196

Federal Registrar June Dunn
26 Napoleon St.
Rosebery, N.S.W., 2108

Advertising Manager Stuart Westerman
10 Gardenia Cres.,
Cheltenham, Vic., 3191

THE SECRETARY'S DESK

During the latter part of the year Keith Wilcox found it necessary to resign from the C.O.M. for business reasons. Keith had been on the committee since it came to Sydney in October '68. During this period he did a lot to promote AMRA and made several interstate trips to further these ends.

Another equally long serving committeeman, who will not be seeking re-election this year will be Treasurer, Keith Robinson, who has done an excellent job of this position, and has seen membership grow from 308 to 869 without the loss of a cent. My thanks to both for all the support they have given me in this period.

They are both very busy men, but were prepared to give that amount of precious time necessary to fulfill their appointed duties to the Association.

At the time of preparing this, the number of nominations for the new COM is appalling. The form states that two members will not be re-nominating this year, yet back come forms, marked "re-nominate present committee." The willing horse has been known to baulk.

Like a scratched record I must repeat for the umpteenth time, when changing address, please notify the FEDERAL REGISTRAR. At present it costs up to 33 cents to send a single missed copy, what it will be under the new postal charges, I shudder to think. So be warned, if a member can not be bothered to notify the Registrar, in reasonable time, no back copies of Journal will be sent unless the full postage is met.

At the end of August our membership had reached 869, yet how few we ever hear from, no problems, nothing to tell anyone else, no suggestions!

I wonder what reaction there are to the letters in issue 116 of Journal. What does the Association mean to you? What are your thoughts on standards? Have you ever given any thoughts to the need for them, or if your rolling stock generally remains on the rails during operations? Are you satisfied that you and your friends can interchange equipment on one anothers layouts, overlooking the possibility of different couplers? Of those who use KD's, how many take the trouble to install them the recommended way, or is it easier to bung them on the easiest way and hope they will operate, well most of the time?

I have seen on some layouts, the same piece of rolling stock repeatedly derail at the same spot, but no investigation done to rectify the trouble. At an exhibition this does not really create a good impression of the hobby. Derailments will occur for various reasons, I think some spectators actually hope they will happen and the more spectacular the better.

Providing the new C.O.M. does get nominated, one of the first jobs will be to do a budget on Journal and see if it will be possible to revert to six issues again. The amount of copy the Editor gets will also have a bearing on the matter.

One does expect somr support and encouragement to continue these honary positions, the time Rex alone has given to Journal, would have covered building quite a large layout, with rolling stock and scenery, so how about just a bit of your time in some form or other?

It would appear that the 25th Birthday plans have been scuttled by inflation. Our figures had been based on a maximum possible increase in charges by Easter '76 rather than a minimum and having to ask for increased contributions at the last minute. Refunds are easier to make than requests for more cash. Looking on the bright side, if the plans fizzle out it will give me some time to get back to the Castle class, put aside 12 months ago, which originally was supposed to be ready for the Oct. '74 Exhibition, but with luck '76.

Norm Read.

IS IT A MODEL RAILWAY?

PART 6.

by E. G. Watson

Before Model Operations Begin.

Before model operations can begin two things must be eliminated.

1. Excessive Speed.

Do you realise that if a train (on HO/OO) travels 14" per second it is travelling at a scale speed of 60 mph? You must control the speed of the train so that it is going slow enough not to derail on curves, points and crossovers and you do not crash trucks while shunting.

If you can get hold of a working time table, you will find it a store house of data, and get an idea of the permitted speeds over points, crossovers etc.

2. Knob twiddling.

Without exception whenever I have let anyone else handle the controls of my layout there has been trouble caused by knob twiddling. The only way to avoid trouble is to,

(i) make the road for the train,
(ii) start train moving at correct speed, and
(iii) don't touch anything until it is time for the next operational move such as slowing train down, stopping it, etc.

If you have a lever frame, until you get really familiar with it, possibly it would be better to wait until the train stops before putting the road back behind it. Certainly be careful if you have hand-operated signals and points as one can easily cause a derailment reaching across the base board, AND DON'T TWIDDLE WITH THE CONTROLS AND LEVERS.

One other factor needs consideration here. A question I'am often asked is "How many trains do you have," As I am not a train collector I do not have any.

What I do have is a large, carefully selected "stable" of engines, rolling stock, DRM power vans and coaches that I make up into trains to suit my requirements, which is standard prototype procedure. For example on the V.R. suburban scene, according to the line, day of the week and time of day, 1, 2, 4, 7 and 8 carriage suburban trains run.

The length of goods trains varies from 72 GYs to engine, one truck and van. Light engines (engine alone) and "bonas" (engine and van) also run.

These points if kept in mind, can add a great deal of variety in the trains we run, plus we can run more trains with less rolling stock.

Re-organization of model railroading in Europe

By Franz Moeller (West Berlin)

Reprint from AMRA Journal Vol. 3 No. 4
November 1953.

For better understanding on International operation in model railroading it is necessary to point out briefly the historical development of model railroad gauges, scales, track and superstructures. The basis for this consideration is connected closely with the first railroad between Stockton and Darlington in England where George Stephenson was engaged to build this line. Edward Pease, another great and almost equally obstinate man, ordered him to make the width of his track to that of local country carts; with characteristic thoroughness Stephenson had measurements taken of about 100 carts used by farmers in the neighbourhood. The average width of these carts measured between the wheels at their base was 4' 8½". With the exception of a few countries only (Spain, Portugal), this width of 4' 8½" (1435mm) later became the European Standard Gauge, though not a "rounded", and therefore, not a very convenient figure. This gauge, however, already used in Europe on such a large scale could not be changed without upsetting our whole railway system.

Regarding our model trains; at the beginning of our present century, so-called "toy trains" were in full bloom, and there were only a few people starting construction of real scale models. At that time, 50 years ago, there were several toy railroad gauges in use, all of them big, and they were called: "1" "2", "3", and "4". As such toy trains were very expensive, only wealthy folk could afford them, and they needed plenty of room too! The No. 3 and No. 4 gauges being the largest were so far out of our model railroad world that a few stories only about them have been passed on to our present time. The smallest of them, No. 1 gauge, is still known in our present time, used by a very few people only. At that historical time a proper model scale, according to old catalogues, was not recognisable at all, but the gauge itself gives an idea, i.e.

$$\text{gauge proportion} = \frac{\text{toy train gauge}}{\text{European Stand. Gauge}}$$

with the following result:

Gauge No.	Gauge inches	Gauge mm.	Gauge proportion
4	2¾	69.8	1/20.5
3	2½	63.3	1/22.7
2	2	50.8	1/28.7
1	1¾	44.5	1/32.2

Model scales were unknown and meaningless as no toy trains were built according to any prototype, but were absolute fantasy. All this was happening in England, whilst the Germans were manufacturing for the British trade.

Very soon, based upon gauge No. 1, the so-called and well known "Battle of the Gauges" was started by an important step taken by a set of pioneers who had already succeeded in splitting the model train atom, producing a smaller gauge of 1¼" (31.8mm or 32mm). The smaller gauge had to have a name, as there was no number below No. 1, this gauge was simply called "O".

Gauge No.	Gauge inches	Gauge mm.	Gauge proportion
0	1¼	32	1/45

The introduction of a smaller gauge was a big success for less space was required in the home in comparison with the older gauges. But give some people your little finger and they will soon take your whole hand, and so it proved concerning our model gauges. Another group of pioneers - or radicals - around the time of World War 1 boldly started to cut ZERO in HALF, with the name of their new gauge "OO" in sensible further development.

Gauge No.	Gauge inches	Gauge mm.	Gauge proportion
OO	5/8	15.9 or 16	1/90

Again German toy manufacturers cooperated, and soon after the year 1920 the new gauge was the best joke of that year amongst British model railroad enthusiasts. This gauge is still alive although represented only by the firm of TRIX, and likely to be abandoned if a change to 16.5 takes place.

In further developments new names like A. Stewart-Reidpath and Edward Beal were appearing often in the upcoming model railroad literature. Up to this point no one had taken any care of scales or porportions in our models. But precisionists got to work and they found that the gauge proportion:

16mm/1435mm = 1/90 = 3.38mm/foot

This, according to British opinion, was a very inconvenient calculation. Another gauge proportion in British style is: 3.5mm/foot = 1/87, and this was found much more convenient, so that this gauge "OO" was refined as 16.5mm as a result of such a consideration according to the new gauge proportion 1/87 explained above, last, but not least as refinements of detail came in. This new gauge was introduced therefore as follows:

Gauge No.	Gauge inches	Gauge mm.	Gauge proportion
OO	5/8	16.5	1/87

Then came a great dissension in our "Battle of Gauges". One section of modellers held out for a proportion of 3.5mm/foot because that was the mathematically calculated gauge. The other section was of the opinion that such a gauge of itself was unimportant as at that time model wheels and truck frames were made of lead, and these were much thicker than scale. Furthermore, it was pointed out that no suitable motors of such a small size were obtainable. To get scale appearance they therefore built over size car bodies, giving scale overhang beyond the wheels and trucks, arriving at a scale of: 4mm/1ft = 1/75, although the gauge remained at 16.5mm which is 3.5mm to 1 ft. or 1/87. These people were right, of course, as long as out-of-scale wheels and trucks were obtainable only, and no suitable small motors. This gauge was named: No. OO 16.5mm in 4mm scale, i.e.

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
OO	16.5	1/87	1/76

In this way 3.5 people were now in the minority, and by and by they lost ground. They had to get a new name which was found in HO, meaning "half O", which became now: No. HO 16.5mm in 3.5mm scale, i.e.

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
HO	16.5	1/87	1/87

In the meantime gauge O was also checked, and according to similar considerations it was found that a gauge proportion in British style, was 32mm/1435mm = 1/45 = 6.75mm/1 ft., which was also an inconvenient calculation. Therefore a scale of a rounded figure was adopted 7mm/1 ft = 1/43, this gauge became: No. O 32mm in 7mm scale i.e.

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
O	32	1/45	1/43

This regulation concerning gauge "O" was adopted by French modellers, and a further step was undertaken in order to halve the scale exactly concerning HO gauge in France:

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
HO	16.5	1/87	1/86

Such a development of gauge and scale is of purely historic interest and not practiced by modellers to-day.

It is worth mentioning also that in England gauge No. 1 was adjusted as follows:

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
1	45	1/32	1/30.5

Returning to our HO gauge, the British gauge Ho 16.5mm in 3.5mm scale was taken over by modellers in the USA, and became well known all over the world. A construction scale of 4mm/1 ft. was also developed by American modellers, and this scale was also used for the gauge proportion, so that in the USA a new gauge came into use, i.e. No. 00 19mm (USA)

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
00	19	1/76	1/76

A third 00 gauge was in use in Germany until 1950. Model railroading was developing rapidly in this country particularly in gauge 00 = 16.5mm with a gauge proportion and scale of construction both of 1/87: No. 00 16.5mm (Germany), i.e.

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
00	16.5	1/87	1/87

The following table gives a comparison of these three 00 gauges:

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
00	16.5	1/87	1/76 England
00	19	1/76	1/76 U.S.A.
00	16.5	1/87	1/87 Germany

The German 00 gauge was actually the already known HO gauge. For this reason I changed, in Germany the name of this gauge to HO in a German model railroad periodical of which I was the Editor. This change was immediately followed by other German periodicals and by German manufacturers, so that to-day German 00 gauge has disappeared completely.

Later in England, out of 00 gauge in 4mm scale another gauge was introduced adhering to the original construction scale, the gauge itself being changed to 18mm instead of 19mm as in America. But for reasons of scale appearance (remember scale oversize, overhang, etc.) the gauge was chosen smaller with a proportion of 1/80 and the name EM:
No. EM 18mm in 4mm scale (England) i.e.

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
EM	18	1/80	1/76

A further development out of "O" gauge and "EM" gauge took place in England in order to meet the demands of precisionists by creation of the gauges "OF" and "EMF" each having the same gauge proportion and the same construction scale, but finer details of wheels and rails. Recently it was found that regarding "OF" gauge these details were too fine, and therefore it was recommended last year to unite "O" gauge with "OF" gauge creating Universal "O" gauge accordingly to test results of Mr. Townley, in England. These new dimensions are, as a matter of fact, in pretty close accordance with the proposed European Standards.

In the direction of gauges larger than 16.5mm in the USA, a gauge between 32mm and 16.5mm named "S" was introduced No. S 7/8" (22.23mm) in 3/16" scale:

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
S	22.23	1/64	1/64

Here gauge proportion and construction scale are of the same value: 22.23mm/1435mm= 3/16"/1ft. = 1/64 which is, according to European opinion due to the use of inches, not a convenient calculation. This gauge was adopted as some people believed that such a medium gauge had much to recommend it requiring less space than 0 gauge, but enabling more detail to be added than is possible with HO.

A similar consideration took place

in Germany and in Austria where a gauge of 24mm., named ZO is in use: 24mm, i.e.

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
ZO	24	1/60	1/60

It is interesting to note that here gauge proportion and construction scale are of the same value and of a rounded figure, according to European ideas.

In smaller gauges than 16.5mm mention must be made of the well known "TT" gauge of 12mm which was first used successfully in the USA: No. TT in 1/10" scale:

Gauge No.	Gauge mm.	Gauge proportion	Construction scale
TT	12	1/120	1/120

Finally, there are of course, quite a lot of other gauges which are of less importance, or rather, of more or less national character, it is therefore not practicable to include all these gauges in our historical survey which already gives an idea of the existing chaos in gauges. It can therefore be well understood that now the determination of so called Model Railroad Standards had become an exigency. All these Standards were based upon test results of certain dimensions, all of them claiming safe operation, though diverging enormously. The best known Standards are:

NMRA	United States	1936
BRMSE	England	1941
MONO	Germany	1950

As the result of careful study of all these Standards and their deviations it was found that the fixed dimensions were not based upon correct physical guiding principles or terms of reference. It is really a pity that the wheels of our prototype railroads are running without difficulties and even crossing the frontiers of various countries, whilst the wheels of our models, according to differing standards are not uniform and therefore producing trouble and difficulties. Such consideration called for research for the purpose of finding directives which would represent a bases for International Standards and I am happy to report that as a result of my research, the first European Convention of Model railroaders at Ruedesheim in September, 1952, was enabled to come to an agreement for European Model Railroad Standards, named NEM (Normes for European Model Railraoders). In this connection the attention may be drawn to the following publications of the Association of German Model Railroaders' Clubs.

1. Minutes covering the Standardization Conference of European Model Railroaders at Ruedesheim, September 12th to 14th, 1952.
2. International Model Railroad Standards, by Franz Moeller, West Berlin.
3. NEM Data Sheets, proposed in October 1952.

The new NEM Standards are based upon an absolutely objective standardization system under NMRA, BRMSB, and MONO standards. The details of the NEM are such that though a little more coarse, it is possible to run NMRA wheels on NEM track as well as NEM wheels on NMRA track and their relations are in correct reference of terms in correct order within one and the same gauges, as well as in relation to the other gauges. The new designed and proposed NEM Data sheets have fixed dimensions about those gauges only which are of international character such as No. 1, O, S, HO, and TT. And it is or course possible to reorganize all other gauges of national or any other character too, as this system covers the whole range of model gauges according to its mathematical system.

HO gauge NEM dimensions have already been proved by test results on the layout of the French Association of Model Railroaders, at Lyon. Italy too is co-operating, whilst the Australian Model Railway Association, (AMRA) with their own Standards are going to cooperate with Europe in fixing a set of universal standards by making any necessary adjustments to either set of standards until both are the same, trusting that this will be satisfactory to an International organization of Model Railroaders.

The founding of an International Federation of Model Railroaders, or Union of International Model Railroaders (UIM) is hoped to be possible at Munich (G) in Sept. 1953, being the second International Convention of Model Railroaders of Europe. Then the prospect arises that as wheels of prototype railraods are running without difficulties from country to country, in the near future NEM wheels will also do the same. In this way a rolling wheel upon a rail becomes a symbol of International understanding between many countries, and it is hoped that such a symbol will be acceptable to become the totem of the Union of International Model Railroaders.

TRACK IS A MODEL TOO, OR AN AID TO BEATING INFLATION

By Ron Cunningham

Having grown up in a modelling atmosphere where handlaying of track has always been the practice, I am always surprised at the replies received when I ask other modellers why they don't lay their own track by hand. These replies are usually of the "too hard" or "too slow" variety.

The following is an attempt to answer these objections. The method described is by no means original, but rather is a collection of ideas and practices from many sources which have proved themselves over time. The skills needed are very simple and are easily acquired with a little practice. On the time aspect a yard of track can be laid in one to two hours, but I have always felt that time should never rule the construction of a layout - it makes it too much of a chore if working to a deadline.

Handlaying results in a product superior in both appearance and performance to purchased flexi-track and both track and more importantly points and crossings can be custom built to suit the track plan.

Finally a BIG plus in favour of handlaying in these inflationary times is the cost factor. A yard of handlaid track costs about $1.00 in materials which is about half the cost of flexitrack. The savings on points are even greater, about 60¢ per point as apposed to over $3.00 in the hobby shop. This represented a saving of over $200 on my current under-construction layout - the price of several brass locos.

Well then having convinced you of the merit of handlaid track, onto the method.

Trackbase. Most layouts are built on the open grid-riser method which can be seen in photo 1. (This is a diorama being built for photographing models, but the principle is the same). The trackbase consists of ½" pyneboard lengths about 2" wide per track which is screwed from below to the risers via cleats, (important for easy moving of track if necessary). On top of the pyneboard is a layer of ½" canite again about 2" wide per track. This material is soft enough to take spikes and, as the spikes do not reach the pyneboard it acts as a sound absorber. Over the years all types of material such as cork, rubber etc. have been tried, but the canite suits us best. The canite is glued to the pyneboard with any white glue such as Aquadhere

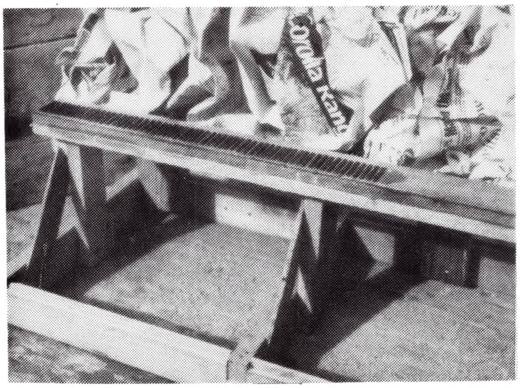


Photo 1. Showing the track base construction. Some sleepers are already in place. The newspaper is the base for scenery to come.

and then given a coat of dark stain. This is not really necessary as it will eventually be covered with ballast and scenery, but this may not be for some time and the stain is not so glaring as the white of the canite.

Sleepers. The making of the sleepers is the most time consuming and tedious task. They can be purchased ready cut, but I prefer for cost reasons to split my own. This is done by obtaining 1/16" sheets of soft pine such as Obechi or King Billy Pine (Model Dockyard or Hobbyco has been my source) or as a second best from the cost angle - Northeastern sheet.

Dimensions will vary according to prototype, but for NSW a 9" wide sleeper can be obtained by splitting 1/10" wide strips from the sheet. These strips are then cut into scale 8' lengths. This exercise can be simplified by first cutting the sheets into lengths about 4 sleepers long. A simple jig can then be constructed to aid the splitting into strips.

A 4" sheet, 36" long will produce about 1000 sleepers or enough for about 22 ft. of track. In an evening work I have split enough sleepers for my entire layout - about 200 ft. of track.

The cut sleepers are then stained to the desired colour. Estapol wood stains are excellent for this and you can obtain a variety of shades to represent different stages of weathering. Experimentation is in order here to get the shades you want.

Sleeper Jig. An indispensable aid to tracklaying is the sleeper jig. One can be manufactured quite simply. Obtain a piece of timber roughly 4" x 1" x 15". Along one edge attach a 1" x ½" stopper strip. Next from 1/32" sheet (or any sheet thinner than the sleeper material used) cut strips which will represent the space between the sleepers. In NSW this space is about 15" to give a 2 ft. sleeper spacing centre to centre. These strips are cut to about 1½" lengths and glued to the jig ends against the stopper strips to represent the spacings.

The sleepers are placed between these strips to give automatic correct sleeper location. To transfer the sleepers to the trackbed obtain a roll of ¼" masking tape. Draw off a piece of tape which exceeds the length of the jig and place this tape along the top of the sleepers. Press the tape down on each sleeper then lift the tape. Provided the sleepers are not too tight in the jig, the tape will lift all the sleepers ready for placement on the trackbed.

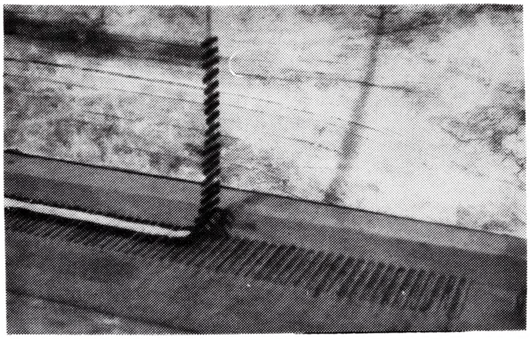


Photo 2. Showing the sleeper spacing jig and the use of the tape to transfer sleepers to the trackbed.

Tracklaying. Return to the track-location and draw a guideline on the canite to represent the edge of the sleepers. Next run some white glue down the centre of the track-location - not too much. Transfer the tape with sleepers attached to the trackbed and locate, using the guideline drawn on the canite.

When the sleepers are in position place a straight edge on top of the sleepers to hold them in position and remove the masking tape. Re-position any that have moved, add any irregularities you want and the sleepers are ready for rail-laying.

At this stage you could sprinkle ballast between the sleepers onto the white glue. This is a temporary effect until later when the full ballasting is done.

When the sleepers are dry you are ready to lay rail - code 70 or 100 for HO, code 100 is easier, but code 70 produces a far better appearance - 3 or 4 track gauges of the 3 point type. Kadee produce a dual code 70/100 gauge which is OK. (if you can obtain any of the old Hambling type these are by far the best) - spikes - steel straight edge and pointed nose pliers.

Rail-laying is easy and straight forward. Using the line drawn on the canite as a guide locate the nearest rail in position and spike about every 10 inches measuring to the guide line. Using the straight edge as a guide pressed against one side of the rail, spike about every fourth sleeper (more frequently on a curve), then switch the straight edge to the other side of the rail and complete the spiking. Sometimes the sleeper splits when spiking depending on the wood used. This can be overcome by drilling the sleeper to be spiked with a pin vice drill. It is only necessary to do this for the side of the rail closest to the sleeper end. This does not take long, you can drill every fourth sleeper in a yard of track in a couple of minutes.

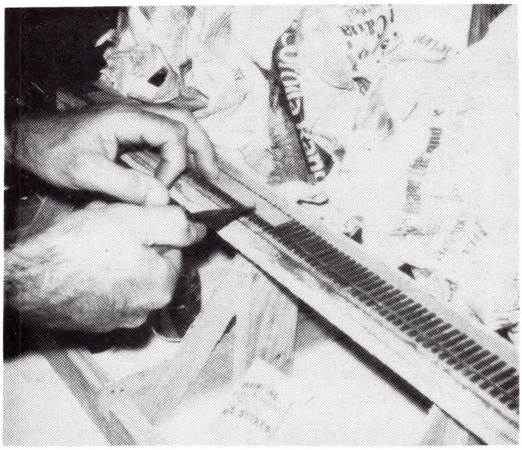


Photo 3. Spiking the first rail.

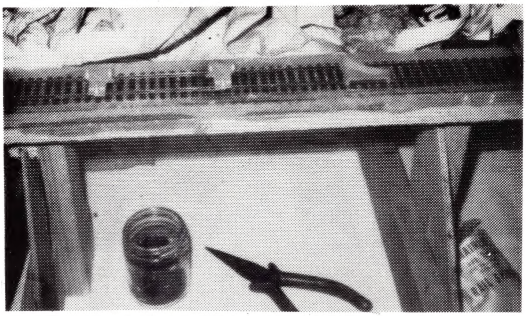


Photo 4. Finally the second rail.

Once one rail is in position you follow the same procedure for the other rail except that the track gauges are used to locate the second rail. Best results are obtained if you use the gauges to spike about every 10 inches then use the straight edge between. It gives a straighter second rail. Constantly check with the gauges and the track is then finished ready for running and ballasting.

By extending this method you can lay curves, points, crossings etc, you can if you want to, install easements and superelevation. It's quite a simple method once you have tried it.

Trackwork is a model too and hand-laying will give you realistic track with superior performance and help make your railway a real showpiece.

In the near future, I'll extend the method to pointwork.

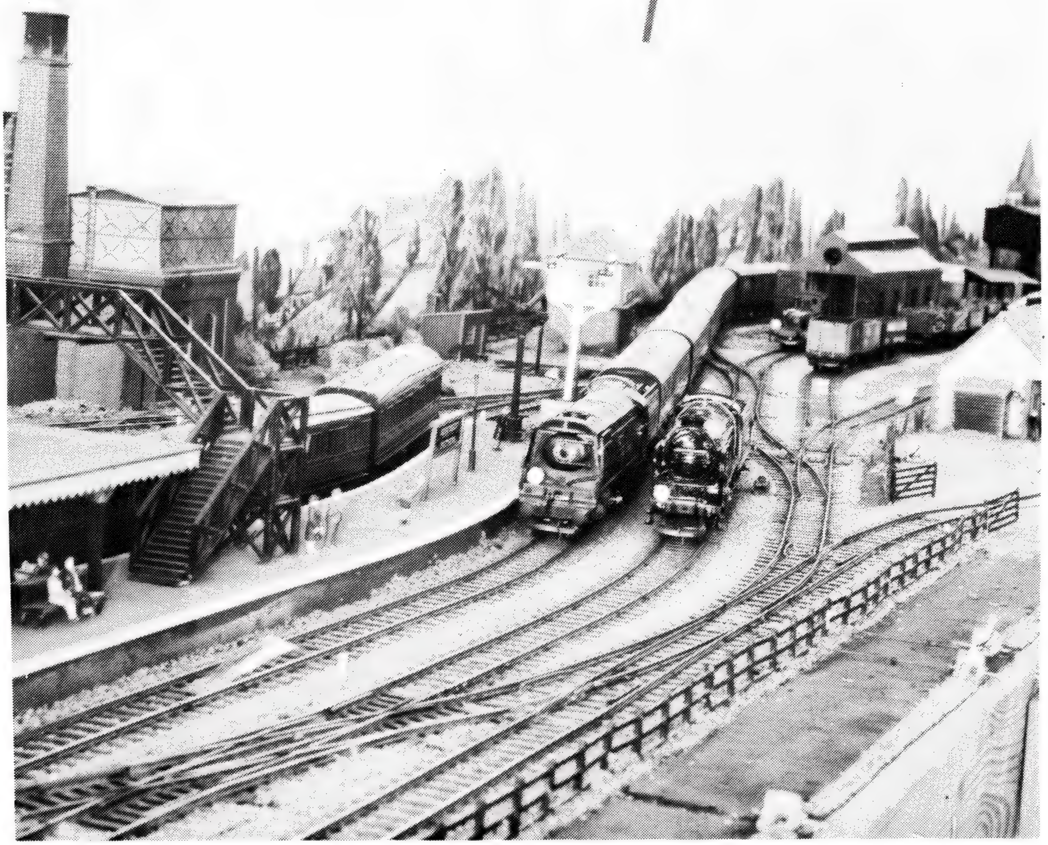
An exercise in imagination

BY PHIL KNIFE

PHOTOS BY AUTHOR

Most readers will agree that railways don't just happen - there is a vast amount of planning and surveying that must be done before the rails are laid. The same certainly applies to a model railway, although, depending on one's taste, often to a lesser degree than on the prototype. If we are to build a convincing model railway we must take our time and plan carefully, tailoring our plans to fit our own wishes and needs. It is this planning process which I aim to discuss in the two parts to this article, perhaps germinating a spark of enthusiasm in others to do likewise.

The layout to be described here in these two articles ABBOTSBURY SOUTHERN is used to explain how this planning process works in practice. It was built in my garage here in Sydney and was fully described in the "Railway Modeller" for July, 1970. Although based very firmly on an English pro-



Abbotsbury station, with an express from London arriving behind West Country class 4-6-2 No. 21C114 "Budleigh Salterton".

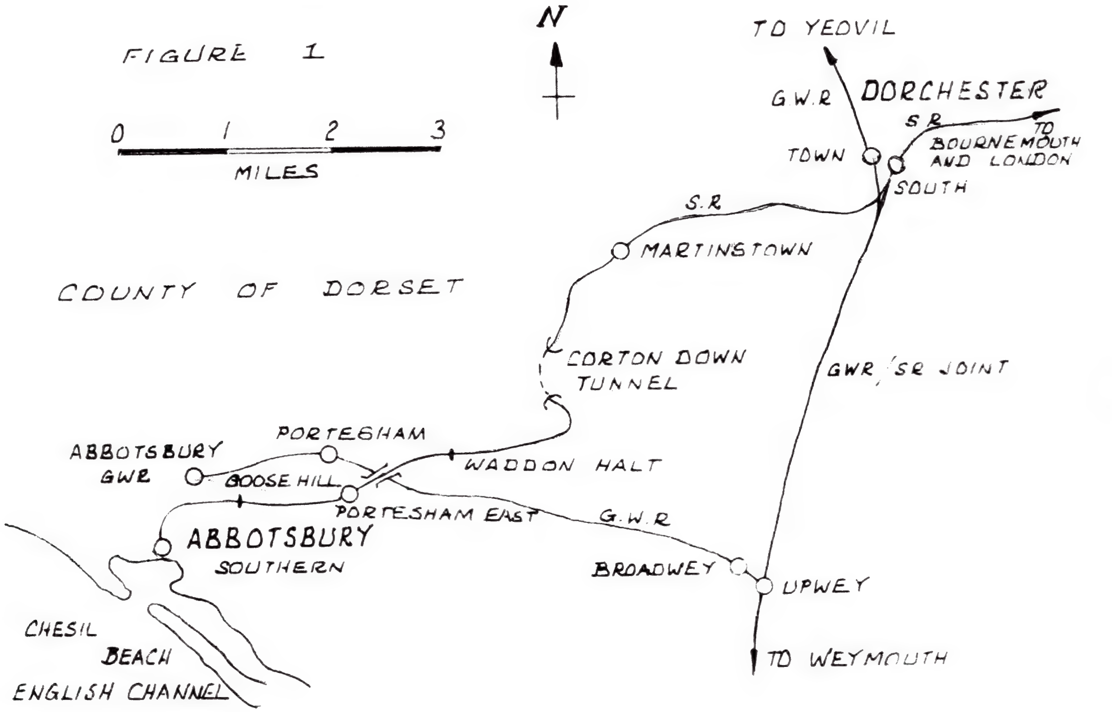
totype, the planning principles are equally applicable to any Australian prototype. Alas, this layout is no longer in existence, but its successor (also Abbotsbury Southern) may be familiar to some readers as it appeared in last year's Sydney exhibition in conjunction with Peter Betts' fine layout. It also featured in the "Railway Modeller of June, 1974. The prototype branch line on which the model is based is quite imaginary but, hopefully, plausible. Read on, then, while I describe the evolution of the first Abbotsbury Southern and the planning process and principles which led to its conception.

Planning the Prototype.

The reason for planning in the beginning is the need for realism in the model and its identification with the prototype. As the model is to be run on strictly prototypical lines a suitable prototype for modelling must be chosen. Abbotsbury, from the outset, was to be a branch line of the Southern Railway of England in about 1947, the last year under private ownership before all the railways of Great Britain were nationalized. I wanted the line to serve a small coastal town, so the possibilities at this stage were narrowed down to one or two. The appropriate large scale map was purchased and detailed investigation commenced. Because of the difficulties of modelling an exact prototype station twelve thousand miles away, my branch had to be imaginary, yet completely plausible. (Those who read the writings of Peter Denny and John Charman, to name but two, will know what I mean).

Abbotsbury, in the county of Dorset was chosen. It already had a rail-service, but provided by the arch-rival the Great Western Railway, and met my other requirements. On reference to the map of the area it was quite possible for a line to be run from a junction with the main Dorchester - Weymouth line just south of Dorchester to Abbotsbury (see Fig. 1). Following the contours to avoid excessive gradients and

FIGURE 1



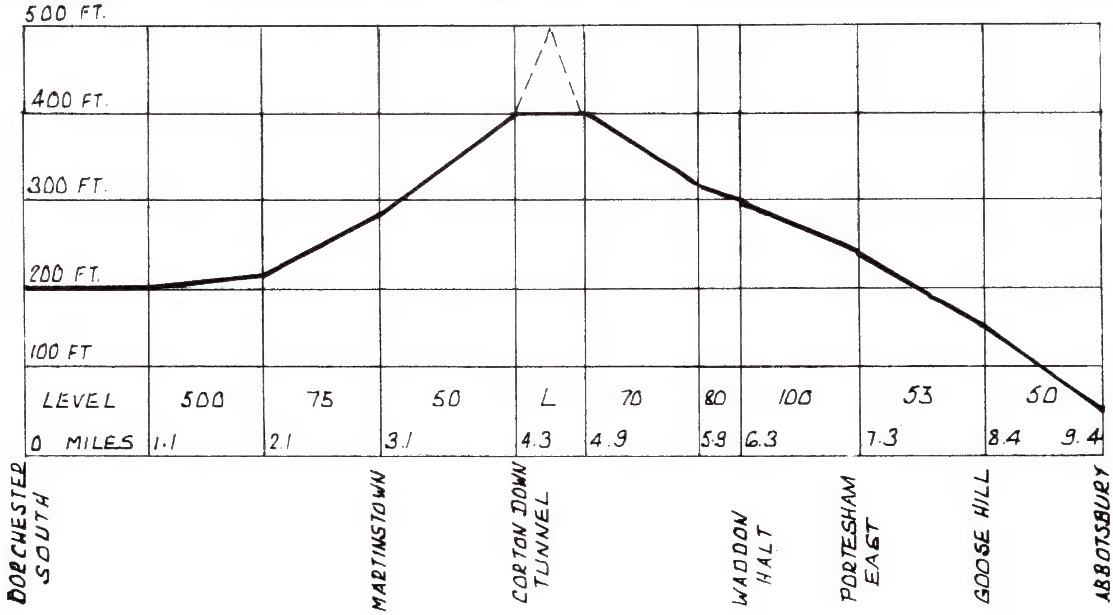


FIGURE 2 ABBOTSBURY BRANCH (S.R.) GRADIENT PROFILE.

heavy civil engineering works, the line could have passed near the villages of Martinstown and Portesham, crossing above the GWR Abbotsbury branch east of Portesham. A short tunnel would have been necessary under the summit of Corton Down, and the final mile or so to drop at 1 in 50 to the coast. The whole project seemed plausible, especially as competition was fierce between the railway companies of the day when the line would have been built and uneconomic competition considered completely justified. Abbotsbury was, therefore, chosen as the prototype.

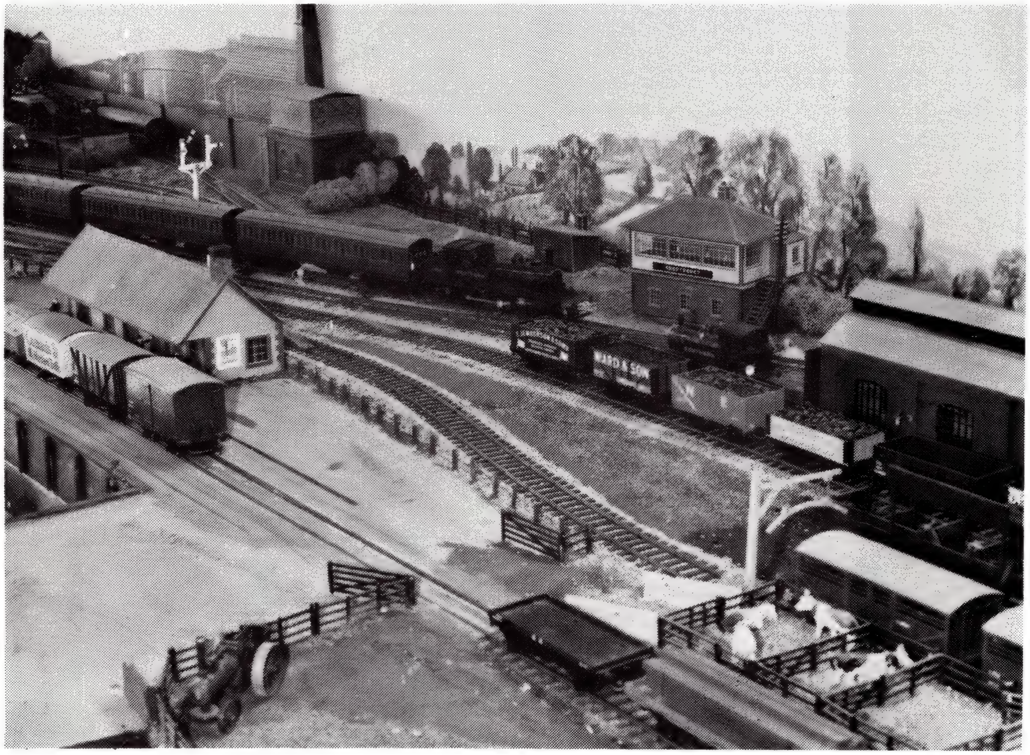
In order to rationalize this apparent meddling with history some research was necessary into the beginnings of the railways in the area. This fascinating glimpse into railway history revealed that a standard gauge extension of the main line of the London and South Western Railway from Dorchester to the Channel coast, right through Brunel's broad gauge territory, could have been a gem for the standard gauge protagonists. (You may think early Australia was had enough for mixed gauges - the GWR main lines had a gauge of 6'0¼" up until 1892, hence the "Gauge War" between the GWR and its competitors). Therefore, the project was begun in 1857 by the LSWR to extend their main line to a new port of their own at Abbotsbury. With the eventual opening of the dual-gauge joint line from Dorchester to Weymouth the Abbotsbury extension became redundant and was never developed as a main line. Never the-less, it prospered as a branch line and the little port of Abbotsbury prospered with it. In 1923 the LSWR was absorbed into the Southern Railway, and so the SR operated the Abbotsbury branch until it, too, was absorbed into the nationalized British Railways.

Having found the locality, planned the prototype and made it believable with a slight adjustment to history, my next task was to draw up the gradient profile for the line. This was done quite simply by measuring distances along the planned route and comparing it with the contours. The result is the graph shown in Fig. 2, from which can easily be calculated the various gradients. This will be used as the basis for timetable planning later on.

Analysing the Traffic.

Research carried out up to this stage had given a fair indication of the type of traffic the line would have carried. In considering Abbotsbury as a small coastal port I imagined it would support a small fishing fleet and a declining coastal shipping trade. The general locality around Abbotsbury would have some stone quarries and, of course, a certain amount of farming and grazing would be expected. Abbotsbury would have received coal, general merchandise and some traffic for transhipment at the quay. In turn, farm produce would be despatched, with merchandise from the quayside and a general traffic in livestock. Stone from local quarries would be unlikely to be passed through Abbotsbury, unless to be moved by sea. As a result, I allowed provision for handling quarry traffic further up the line (in my plans for later extension) and just concentrated on the merchandise already mentioned. Bulk handling of any items, except coal, would have been unlikely. In summary then, provision would have to be made for incoming coal and general merchandise, for handling goods over the quay and for outgoing farm produce, livestock and general goods transhipped at the quay.

Passenger traffic was analysed in the same fashion. I decided that my requirements would be almost identical to the nearby LSWR branch line from Wareham to Swanage, and so I designed passenger facilities accordingly. Two push-pull units were required to handle local branch passenger traffic between Corchester and Abbotsbury. A twice-daily through service to Bournemouth was also



Abbotsbury goods yard, with the yard shunter on shed (0-6-0T No. 1323) and 4-4-2T No. 3488 departing with a semi-fast passenger train to Bournemouth.

required, along with once-daily through coaches from London. With the post-war resurgence in holiday traffic such a seaside locality as Abbotsbury would attract through trains from London, Reading, Birmingham and Bath, allowing for connections from the north of England. I assumed, therefore, that summer Saturdays were likely to be very busy and that goods and local traffic would have be curtailed for the additional passenger traffic.

Planning the Facilities.

Armed with this detailed knowledge of the type and variety of traffic the line was to handle, I drew up a list of facilities required. Obviously a passenger station capable of handling local and through passenger trains was essential. At first a long platform with bay, vis-a-vis Swanage, was provided. This turned out to be inadequate, so a third platform for parcels handling had to be added. This platform could also cope with passenger traffic at peak periods, especially on summer Saturdays. Being a sea-side town with limited port facilities a quayside line was essential. This needed a crane for transhipping goods to coasters alongside, and warehouse facilities. The relatively heavy coal traffic would require a siding and coal-handling facilities, and the general merchandise, a fair-sized goods shed. A cattle dock would be necessary and, of course, spare siding space for accommodating empty vehicles. Finally, road access to some of the siding would have to be provided.

A most important reason for going into so much detail to analyse the traffic requirements is to enable one to decide on the number and type of locos and rolling stock the layout would need. Although express passenger locos would be out of place on a line such as this, the extensive summer holiday traffic would allow a "West Country" Pacific to run on odd occasions. I consider it important that the locomotives and rolling stock must fit the locality and period. I do use a bit of modeller's licence in this regard, but I won't run a loco that wasn't in existence at the time that my model depicts.

Finally, before an accurate and realistic timetable can be compiled one must know what sort of trains, and at what frequency, the line will require for its day to day working. Having analysed the traffic the line would bear this final step in the basic planning is quite easy. On this decision of frequency of trains will depend the number of each type of vehicle that is required and the minimum number of locomotives to work the line.

In the second part of this article I will discuss the layout plan itself and how it was devised, the locomotives and rolling stock needed for it and how the timetable by which to run it was compiled. This is probably the most interesting and entertaining part of the whole planning process and the one to which most people look forward. I hope you will join me, then, for the conclusion of this saga in the next Journal.

FOR SALE.

THE ABBOTSBURY SOUTHERN layout, as exhibited at the Sydney Exhibition in October 1974 and featured in the "Railway Modeller" for June 1974. This layout is OO/HO gauge, fully sceniced and is being offered complete with control panel, but without trains or power units. Price is negotiable, but around $150. All enquiries to: P.A. Knife, 7/2 Blake Street, Kogarah, NSW. 2217.

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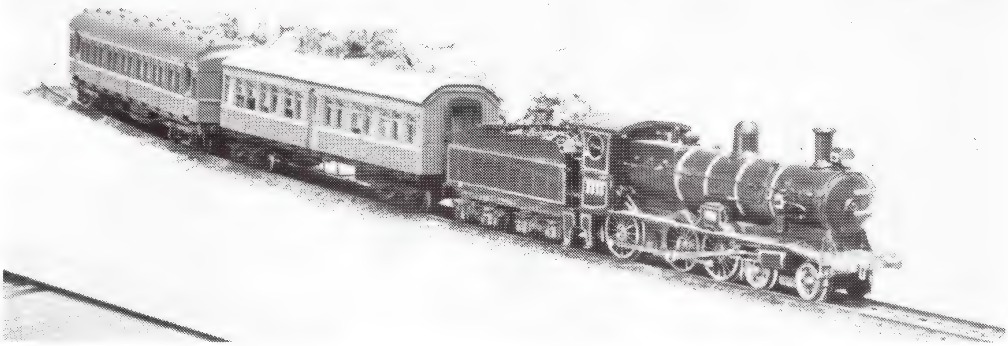
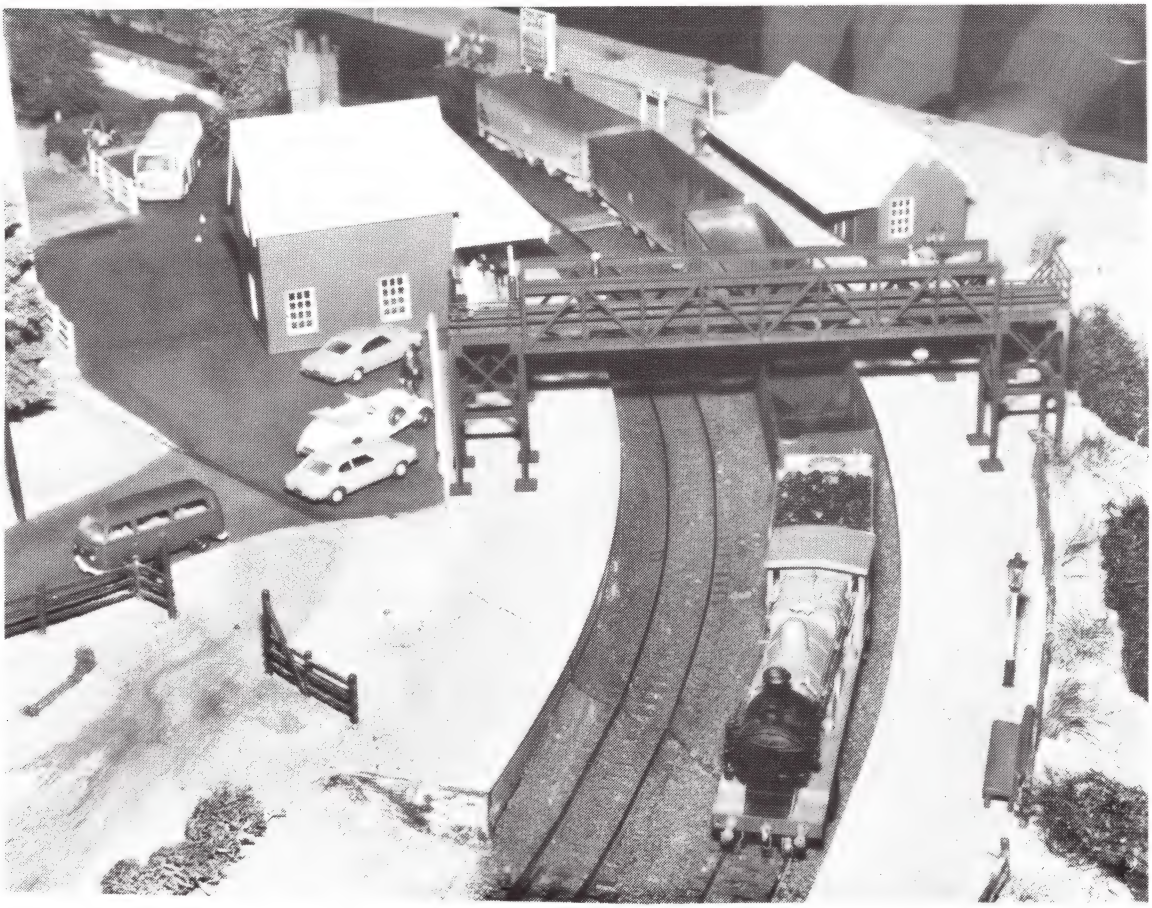
HELP WANTED.

If any member has repowered at Atlas Alco R C 2 diesel or a Sekisue Con-cor PA 1 diesel, Mr.J. Clarke, 10 Clarence St. Maclean, NSW, 2463, would like to hear about it, as his two have faulty armatures and he cannot get them repaired.



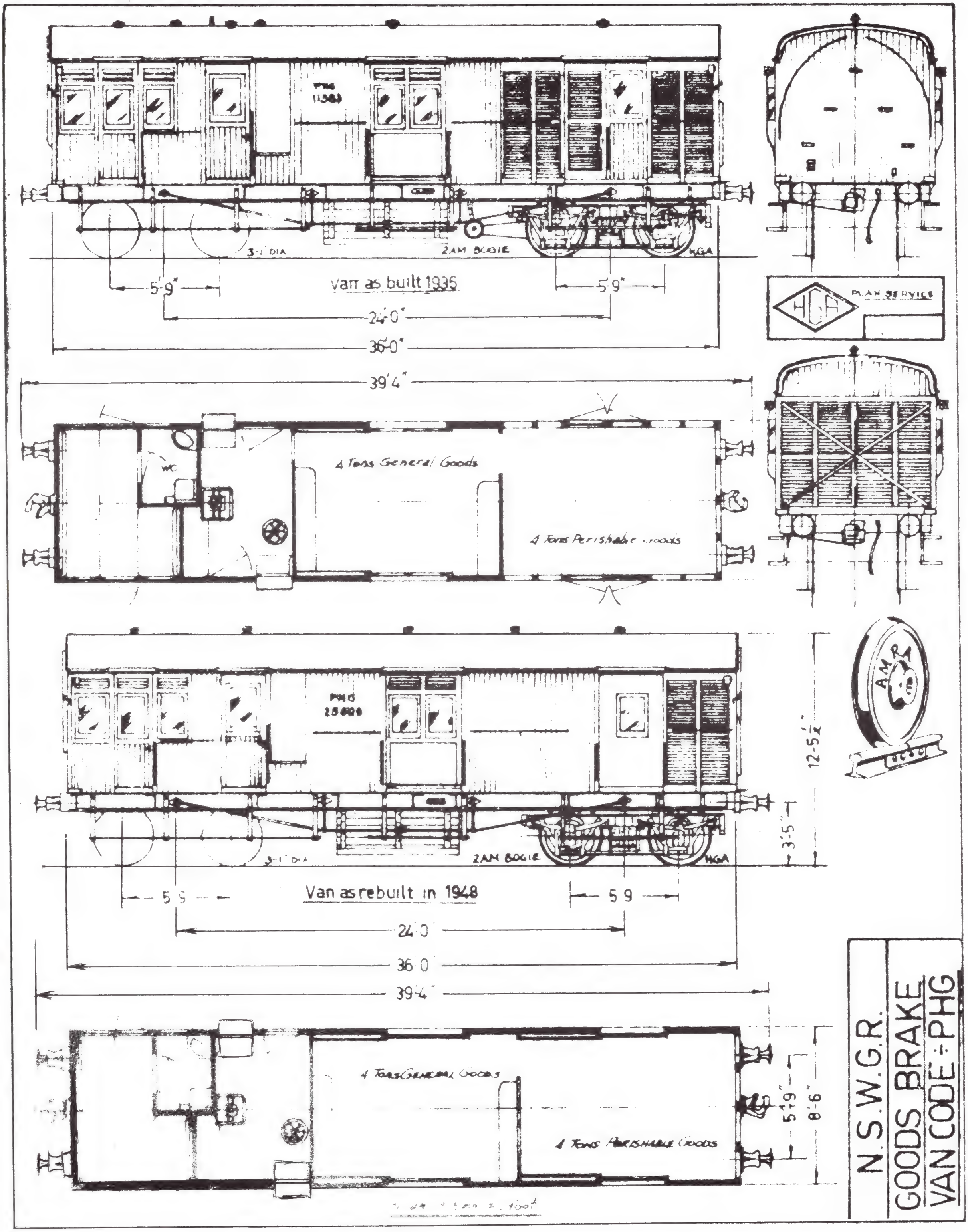
Entries in the AMRA Competition 1974 against background scenery by John Dunn. Peter Bett's 32, Kevin Brown's FR, Allan Brown's SBX.

Photo - Jack Parker.



A 32 class loco works a goods through Bullinga Station on the well detailed HO layout of the Hurstville Model Railway Club at the 1974 AMRA Sydney Exhibition.

Photo - Alan Templeman.


PHG
11383
3-1 DIA
2AM BOGIE
HGA
5'9"
van as built 1936
5'9"
24'0"
36'0"
HGA
PLAN SERVICE
39'4"
WC
4 Tons General Goods
4 Tons Perishable Goods
PHG
25686
12'-5 1/4"
3'-5"
3'-1" DIA
2AM BOGIE
HGA
5'9
Van as rebuilt in 1948
5'9
24'0
36'0
39'4"
4 Tons General Goods
4 Tons Perishable Goods
5'9"
8'6"
A.M.R.A.
N.S.W.G.R.
GOODS BRAKE
VAN CODE : PHG

SOME MODEL RAILWAY GUAGES & SCALES

BY W. U. BATES

Recently, needing to settle an argument, I started looking through various Model Railway magazines for the different scale/gauge relationships in "N" gauge. The following table gives the results of my research, and I hope that you are not quite as confused as I am.

The figures in the table are arithmetic conversions, and are corrected to the third figure. The assumptions used are:
1 inch is 25.4mm
4'8½" is 4.708' or 1435.1mm
1'0" is 304.8mm

Gauge is defined as the distance between the inside faces of the heads of the rails, and it can be seen that in some scales the gauge represented is a long way out. For example "G" gauge, used in garden railways on No.1 gauge track, or HOJ used to represent 3'6" gauge Japanese railways.

However, 9mm gauge using 1.9 mm/ft. scale represents Standard Gauge, and that was what started all this.

SOME COMMONLY AND UNCOMMONLY USED SCALES AND GAUGES IN MODEL RAILWAYS.

GAUGE NAME	MODEL TRACK GAUGE INCHES	mm	WHICH IS	AT A SCALE OF in/ft	mm/ft	PROPORTION (RATIO)	REAL TRACK SIZE
15 inch	15.0	381.0	5' 0"	3.0	76.2	1:4	4' 8½"
1½" Scale	7.5	190.5	5' 0"	1.5	38.1	1:8	4' 8½"
1½" Scale	7.25	184.15	4' 10"	1.5	38.1	1:8	4' 8½"
1½" Scale	7.0	177.8	4' 8"	1.5	38.1	1:8	4' 8½"
1" Scale	5.0	127.0	5' 0"	1.0	25.4	1:12	4' 8½"
1" Scale	4.75	120.7	4' 9"	1.0	25.4	1:12	4' 8½"
¾" Scale	3.5	88.9	4' 8"	0.75	19.05	1:16	4' 8½"
G Gauge	1.772	45.0	3' 3.88"	0.533	13.54	1:22.5	4' 8½"
GM Gauge	1.772	45.0	1012.5mm	0.533	13.54	1:22.5	1 metre
K Gauge	1.77	45.0	1012.5mm	0.533	13.54	1:22.5	1 metre
No. 3 Gauge	2.5	63.5	5' 0"	0.5	12.7	1:24	4'8½"
½" Scale	2.25	57.15	4' 6"	0.5	12.7	1:24	4' 8½"
No.2 (7/16")	2.0	50.8	4' 6¾"	0.438	11.13	1:27.4	4' 8½"
7/16" Scale	2.125	54.0	4' 10.4"	0.438	11.13	1:27.4	4' 8½"
Lionel Std.	2.125	54.0					
No.1 Gauge	1.77	45.0	4' 8"	0.375	9.53	1:32	4' 8½"
1n3½	1.25	32.0	3' 4"	0.375	9.53	1:32	3' 6"
O(Ob)England	1.25	32.0	4' 6.84"	0.276	7.0	1:43.5	4' 8½"
O (17/64")	1.25	32.0	4' 8 3/8"	0.267	6.77	1:45.18	4' 8½"
OnM	0.825	21.0	948.7mm	0.267	6.77	1:45.18	1 metre
Oc(Continent)	1.25	32.0	4' 8 3/8"	0.267	6.77	1:45.18	4' 8½"
OM75	0.65	16.5	74.25cm	0.267	6.77	1:45	75cm
O (¼")	1.25	32.0	5' 0"	0.25	6.35	1:48	4' 8½"
OA (¼") (Q)	1.17	29.9	4' 8½"	0.25	6.35	1:48	4' 8½"
On3½	0.875	22.2	3' 6"	0.25	6.35	1:48	3' 6"
On3 (Q36)	0.75	19.05	3' 0"	0.25	6.35	1:48	3' 0"
On2½	0.65	16.5	2' 7.2"	0.25	6.35	1:48	2' 6"
On2	0.5	12.7	2' 0"	0.25	6.35	1:48	2' 0"

¼"AAR (exact scale	1.177	29.9	4' 8½"	0.25	6.35	1:48	4' 8½"
S (3/16")	0.875	22.2	4' 8"	0.188	4.8	1:64	4' 8½"
Sn3½	0.650	16.5	3' 5"	0.188	4.8	1:64	3' 6"
Sn3	0.563	14.3	3' 0"	0.188	4.8	1:64	3' 0"
Sn2½	0.471	12.0	2' 6"	0.188	4.8	1:64	2' 6"
00	0.65	16.5	4' 1½"	0.157	4.0	1:76.2	4' 8½"
00 (NMRA STD.)	0.77	19.0	4' 9"	0.157	4.0	1:76.2	4' 8½"
PROTOFOUR	0.739	18.83	4' 8½"	0.157	4.0	1:76.2	4' 8½"
00n3	0.472	12.0	3' 0"	0.157	4.0	1:76.2	3' 0"
00 BG (Irish)	0.825	21.0	5' 3"	0.157	4.0	1:76.2	5' 3"
EM	0.707	18.0	4' 8½"	0.150	3.82	1:80	4' 8½"
OHJ (Japan)	0.650	16.5	4' 4"	0.150	3.82	1:80	3' 6"
3.75mm	0.650	16.5	4' 4.7"	0.148	3.75	1:81.28	4' 8½"
HO	0.650	16.5	4' 8.53"	0.138	3.5	1:87.1	4' 8½"
HOn3½	0.472	12.0	3' 5 1/8"	0.138	3.5	1:87.1	3' 6"
HOnM	0.472	12.0	1044mm	0.138	3.5	1:87.1	1 metre
HOn3	0.413	10.5	3' 0"	0.138	3.5	1:87.1	3' 0"
HOn2½	0.354	9.0	2' 6.85"	0.138	3.5	1:87.1	2' 6"
HOM75	0.354	9.0	78.5cm	0.138	3.5	1:87.1	75cm
HOn2	0.276	7.0	0.138	0.138	3.5	1:87.1	2' 0"
1/8"	0.650	16.5	5' 2.4"	0.125	3.18	1:96	5' 3"
TT3 (England)	0.472	12.0	4' 0"	0.118	3.0	1:101.6	4' 8½"
TT3n3½	0.413	10.5	3' 6"	0.118	3.0	1:101.6	3' 6"
TT3n3	0.354	9.0	3' 0"	0.118	3.0	1:101.6	3' 0"
TTn3½	0.354	9.0	3' 6½"	0.100	2.54	1:120	3' 6"
NZ120 (N.Z.)	0.354	9.0	3' 6.48"	0.100	2.54	1:120	3' 6"
TT (NMRA STD.)	0.471	11.96	4' 8.64"	0.10	2.54	1:120	4' 8½"
TT (Europe)	0.472	12.0	4' 9.6"	0.098	2.5	1:122	4' 8½"
N 2-1/16mm	0.354	9.0	4' 4.4"	0.081	2 1/16	1:148	4' 8½"
000(N)	0.354	9.0	4' 6"	0.079	2.0	1:152	4' 8½"
Nn3½ (000n3½)	0.276	7.0	3' 6"	0.079	2.0	1:152	3' 6"
NnM (000nM)	0.256	6.5	978mm	0.079	2.0	1:152	1 metre
NBG (000BG)	0.413	10.5	5' 3"	0.079	2.0	1:152	5' 3"
N	0.354	9.0	4' 8 7/8"	0.075	1.9	1:160	4' 8½"
Nn3½	0.256	6.5	3' 6"	0.075	1.9	1:160	3' 6"
Z	0.256	6.5	4' 7.8"	0.055	1.39	1:220	4' 8½"
2 7/8 inch	2.875	73.0	4'6.7"	.630	16.0	1:19	4'8½"
On 2 7/8"	1.25	32.0	2'0"	.630	16.0	1:19	2'0"
On3G	1.25	32.0	2'3.4"	.551	14.0	1:21.8	2'3"
#3	2.5	63.5	4'6.4"	.551	14.0	1:21.8	4'8½"
※3	2.5	63.5	4'8.6"	.530	13.46	1:23.2	4'8½"
1F	1.77	45.0	4'6"	.394	10.0	1:30.5	4'8½"
※1	1.75	44.5	4'5.4"	.394	10.0	1:30.5	4'8½"
On1G	1.25	32.0	3'2.4"	.394	10.0	1:30.5	3'0"
Standard	2.125	54.0	5'8.2"	.375	9.5	1:32	4'8½"
Standard	2.125	54.0	4'10.2"	.4375	11.13	1:27	4'8½"
OF	1.25	32.0	4'6.8"	.276	7.0	1:43.5	4'8½"
00n	0.65	16.5	2'4.2"	.276	7.0	1.43.5	2'3"
TT3n	0.47	12.0	2'2.2"	.217	5.5	1:55.4	2'3"
H1	0.875	22.1	4'8"	.1875		1:64	4'8½"
S (Europe)	0.875	22.1	4'7.5"		4.7	1:65	4'8½"
EM	0.70	18.0	4'6"	.157	4.0	1:76.2	4'8½"
009	0.354	9.0	2'3"	.157	4.0	1:76.2	2'3"

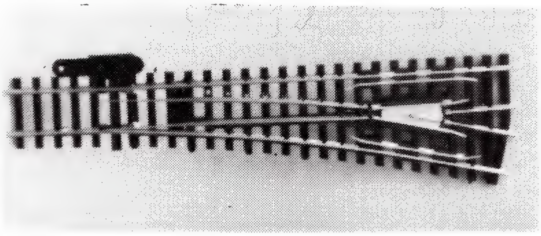
Gauge Name	Model Track Gauge inch	mm.	Which is	At a Scale of inch/ft	mm/ft	Ratio	Real Track Size
HOE	0.62	16.0	4'6.9"	.138	3.5	1:87	4'8½"
OOE	0.65	16.5	4'10.5"	.083		1:91	4'8½"
E	0.59	14.9	4'8.2"	.125	3.18	1:96	4'8½"
QO (USA)	0.60	15.2	4'9.6"	.125	3.18	1:96	4'8½"
OOC	0.56	14.3	4'8.3"		1cm/m	1:100	4'8½"
TM	0.53	13.5	4'6"	.119	3.0	1:101.6	4'8½"
TT.X	0.47	12.0	4'3"	(1/9") .111		1:108.1	4'8½"
HOO	0.39	10.0	5'0"	.079	2.0	1:144	5'3"
QOO	0.30	7.62	4'4.1"	.069		1:174	4'8½"
K	0.31	8.0	4'5.6"		1.75	1:180	4'8½"

EEM) See Protofour.
EMF)

Addendum. OO (NMRA STD.) Model track gauge should be .75" 19.0mm.
All these scales and gauges exist or existed.
Some gauge names e.g. E, PO, HL, S and S (Europe) vary slightly, by ratio only, but each had at least one manufacturer produce equipment to that gauge name.

PRODUCT REVIEW

GRAFAR N gauge points.

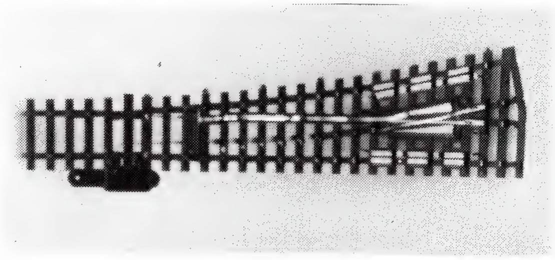


This new N gauge point was supplied by the manufacturer and sells in England for £1.35 each including tax. It will be available in Australia for around $4.00 (it may be a little more). The point will be available as either left hand, right hand, or Y 18" radius, and feature self isolation in conjunction with a live metal frog. All track work is nickel silver, and the moulded sleepers have a wood grain finish.

The bubble pack states that the points have sprung blades. The only "springing" I could find was the flexing of the moving blades against the stock rail when the point closes.

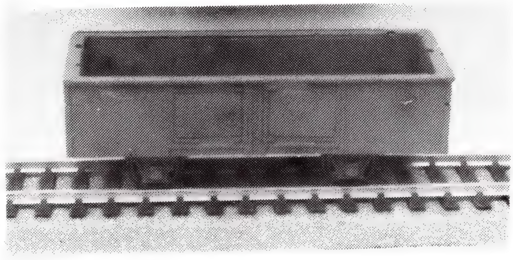
The lack of any insulation between the "jumper leads" built in under the frog could cause "shorting" when the point is fixed down, unless the modeller slipped in some insulation, or else painted the jumpers with nail polish.

If the point works as good as it looks, I would say it will be a winner. I will install it in an exhibition "N" gauge layout and hope that we will get some comments on its performance later.



BUYER'S GUIDE

Kit Review

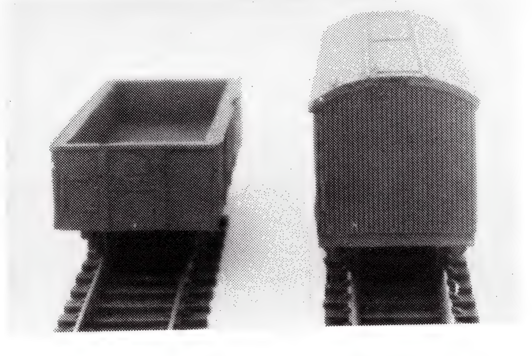


Friedmont Models; V.R. wooden ice refrigerated van, class T obtained from The Engine Shed @ $3.45, plus 0.55¢ for a PMH underframe; also obtainable from The Signal Box for similar prices.

A one piece moulding of roof sides and ends, with a separate floor. The model has very little flash and excellent detail. It is a model of the 15½ ton unit and measures 25'3" over the buffer beams, is 8'0" wide across the buffer beam, and has a 14'4" wheelbase. The only measurements I have are the internal measurements and it would seem from these that it should be 6" to 8" higher. End detail is lacking and could be easily added. The model can be converted to a TP by the addition of a 3'0" door near each end and using passenger type bogies such as roundhouse No. 2932 - standard 4 wheel pullman.

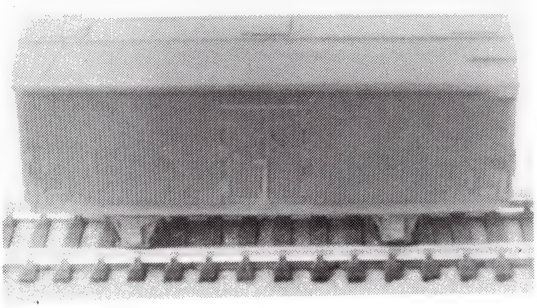
For the average modeller this unit would give another welcome addition to the roster for an afternoon's work.

As with other kits in this series the super-detailer can add shunter's steps, grab irons, brakes etc. to complete the model.



Friedmont Models, V.R. open wagons, class RY obtained from The Engine Shed @ $3.45, plus 0.55¢ for a RMH 11'6" wheelbase, 4 wheel underframe; also obtainable from The Signal Box for similar prices.

A one piece moulding with reasonably good detail - the sides are excellent, but the ends are a little unreal. Using the dimensions shown in AMRA Journal 82, the body measures 22'0" over buffer beams, 9'2" wide and 4'3" high (above the buffer beam) at 3.5mm/foot scale.



The kit needs only the addition of the shunter steps, brake handle and a coat of paint to be a welcome addition to the roster.

For the super detailer or rivet counter the ends will need a slight modification, the addition of the shunter's grab rails, and the tarpaulin rods. To disguise the thickness, either a load or a tarpaulin can be fitted.

The plastic (casting resin) is fairly brittle and fine details such as the thin rolled edge at the top of the body is easily damaged. The roneoed instruction sheet is quite adequate for this model. The whole job of assembly and painting can be finished in an afternoon, making this a quick addition to the roster.

Rex Little.

2 RAIL TRACK CIRCUITING

Reprint from N.Z. Model Railway Journal, Oct/Nov 1972.

BY A.E. KOCH

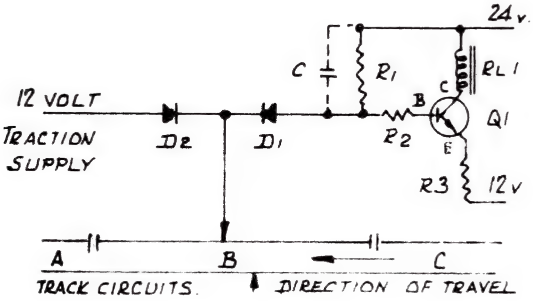
A very useful device in model railroading is the track circuit. With it one can build automatic signalling, illuminated track diagrams, and the like, all of which are very impressive. Here then is the circuit diagram for the track circuit and an explanation of how and why it works.

I hope I have not been too technical in writing the article, indeed, I have not yet gone to university to find out what some of the technical terms are. The only real worry is that I may have been too vague about how to get transistors in New Zealand. I get mine secondhand at very reasonable prices, about $1.30 per track circuit. It seems rather pointless, in my view, to advocate a track circuit costing three or four times that much brand new.

Components.

Q1 any NPN transistor that takes 30mA Ice.
R1 39K ohms
R2 39K ohms
R3 560 ohms
D1 any signal diode
D2 BY 126 or similar
Relay P.O. 3000 type of Siemens miniature with 1000 to 1600 ohm coils.

Note. All the components the writer uses except the relay and D2 are from surplus 'IBM' computer boards. The IBM transistors were numbered 083 but the choice of these components is not critical except that Q1 should be able to pass about 30mA depending on the relay used, and R3 should be small enough to let the relay operate.



HOW IT WORKS.

When the base of the transistor Q1 is positive with respect to the emitter, the transistor turns on, operating the relay and clearing signals, etc. Now the emitter is a potential of:

$$12 + \frac{R3}{R3 + RL} \quad \text{volts}$$

$$12 + \frac{560}{560 + 1000} \quad \text{volts}$$

that is 16 volts.

The base must be slightly more positive, say 17 volts. The potential at X must be:

$$17 + \frac{R2}{R2 + R1} \quad \text{volts}$$

$$17 + \frac{39000}{39000 + 39000} \quad \text{volts}$$

that is about 20 volts.

When the potential at X drops below 20 volts, the transistor turns off and the relay will drop out putting signals to stop etc.

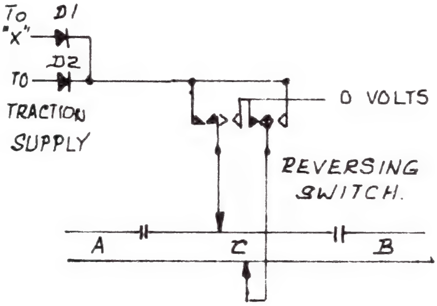
The two running rails act like a switch. When the switch is closed by putting something across the rails, the potential at X will drop. A 10k resistor, or a loco (25) or a carriage fitted with lights (150) will lower the potential at X well below 20 volts.

Now see what happens when the traction supply is turned on to get the trains going. The highest potential X can become as a result, is 12 volts which is well below that is required to interfere with the track circuit.

When the train moves, poor contact between wheel and rail may cause the relay to flicker. If this should happen a capacitor C of about 10 mfd may be added into the circuit as shown in dotted lines.

BAD BUGS.

The diode in the traction supply D2 necessary so that an obstruction in say track circuit C will not cause track circuit A to drop out, prevents train running in both directions - only from right to left. Wiring in a double pole-double throw switch for each track circuit solves this problem (very expensive). So be prototypical - track circuit the main line where trains run in one direction only.



GOOD BUGS.

This circuit uses very little power, perhaps 100mW in the clear position, and about 3mW in the occupied position.

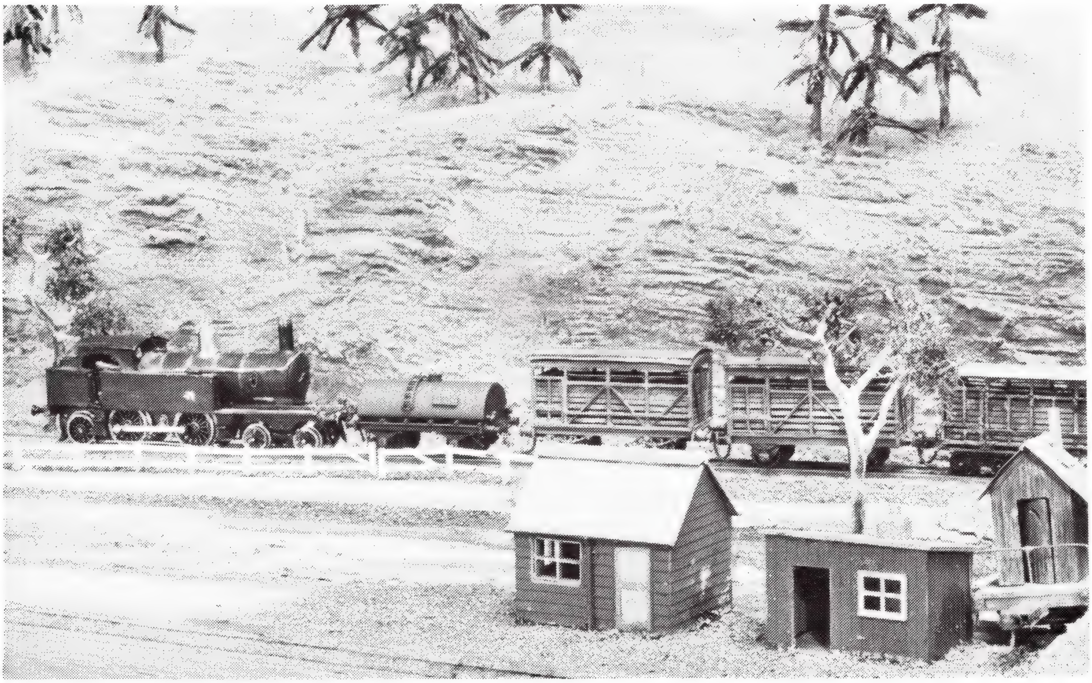
The circuit is also fail-safe and it shouldn't cost too much to build if surplus materials are used.

Happy wiring.

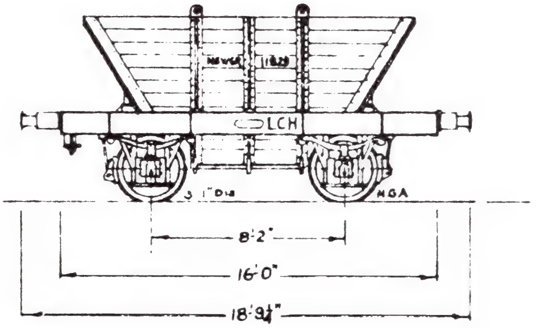
COMMENT.

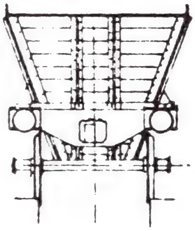
It has been pointed out to me that the equations in "How it works" do not give the answers indicated. I have left them as presented in the original article.

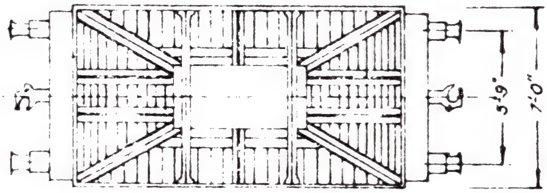
Rex Little.
Editor.



Entries in thr AMRA Competition 1974 against background scenery by John Dunn. M40 Loco by Cedric Rolfe, Water Gin by Graham Ball, Cattle Wagons by Phil.Larmour, Photo - Jack Parker.





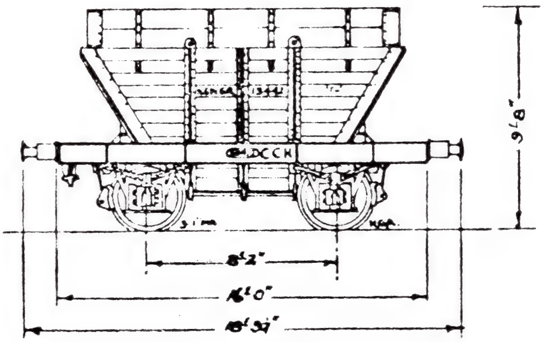


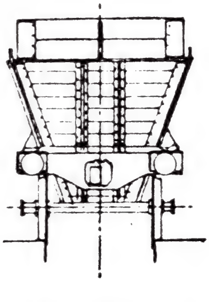
N.S.W.G.R.

16TON COAL HOPPER

CODE : LCH

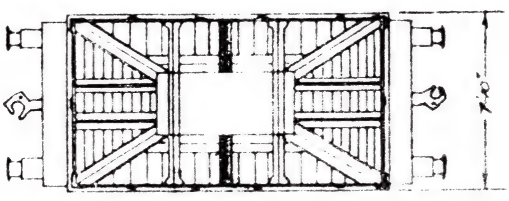
Drawn	H.Armstrong	HGA PLAN SERVICE
Date	Oct 69	
N°		1350





Capacity :- 16 Tons

Tare :- 8 Tons 10 cwt



10 feet 5

Scale 3.5mm = 1 ft

N.S.W.G.R.

20TON COAL HOPPER

CODE: CCH

Drawn	H.G.A.	HGA PLAN SERVICE
Date	Sep 65	
N°		1308

THE POP VALVE!

FOR READER'S LETTERS

The Editor,
AMRA Journal.

Dear Sir,

Exhibitions.

In May/June 1975 four exhibitions were held in Sydney and surrounding area, three of them being held on the same weekend. Probably all four were a success, depending on what individual clubs term a successful exhibition. Some clubs feel if they make a good profit, then that is their idea of a successful exhibition. The fact that they may be showing mediocre exhibits doesn't seem to worry them.

When a club starts thinking of holding an exhibition, it must ask itself is it in a position to stage such an event; are there enough layouts available among its members, if so are they layouts worth exhibiting, not just a piece of board with some track on it? If the members have not sufficient good layouts amongst themselves, can you get them elsewhere, and if so, how much? Exhibitors should receive some compensation toward the cost of their transportation.

If you are a small club 10 to 1 you are only able to hold a small exhibition, possibly up to 10 working layouts so what you show must be of good exhibition quality, or seem to be so. By good quality I'm not necessarily referring to layouts of the nature of, to use an example, the N.S.W. Model Railway Club. Those prizewinning layouts are few and far between, so if you can't obtain one of those don't despair. Good quality need not be truly prototype nor rivet counting, for the purpose of exhibiting to the general public it should be pleasing to the eye and have plenty of action. How often have we seen a colourful Marklin layout at an exhibition draw a huge crowd around it that you could hardly move, those are the prizewinning layouts according to the public popularity. That is why the hobby doesn't let the general public do the judging. It should be the aim of the clubs and exhibition organizers to try and please their customers.

We all hold exhibitions for one primary purpose, to raise funds. Another very good reason is to show off our achievements. Which one of us can say that they don't derive some pride and joy when people praise the effort he has put into his exhibit. Let us not show something that we can't take a bit of pride in. We should do our best to give the public that come to our exhibitions a fair go for their money.

The theme at our exhibitions should be "Give the public a fair go," not "come in suckers".

No doubt there will be some glowing reports on the exhibitions held on the long weekend in June (3 of them) and the words will flow like honey, I feel club reporters should examine their conscience after writing such flowery reports, they most certainly make lovely reading, but are they honest comments?

Remember if you lose public goodwill you've lost your easiest and best source of revenue. The only other alternative is to SLUG THE MEMBERS.

In conclusion I would like to point out to club committees and exhibition organizers, the club I belong to, The Prospect Model Railway Club, has always managed to give members and exhibitors alike good hot meals during its exhibition, gratis. Tea, coffee or cordial and biscuits as many times a day as our members and guests wished, again for free. Whilst I realise at some big exhibitions it would be nigh on impossible to supply free meals, even paid ones, but where tea or coffee is sold on the premises, why not issue free passes for morning and afternoon tea to the exhibiting crews.

My reason for writing the above excluding the last paragraph, is due to the number of adverse reports we heard at our exhibition, we were one of the three clubs that held our exhibition on that weekend.

Bob Payk.

The Editor,
AMRA Journal.

Dear Sir,

This concerns YOU.

In case you did not read The Secretary's Desk in April/June Journal, perhaps you should do so before you read this. Not only are costs escalating, but postal charges have gone mad. At least two organizations to which many of our members belong are in trouble because of rising costs, and they must concern us all.

The new postal charges for adjoining states and especially for states beyond adjoining states will now cost almost as much as Journal does to print, would it be possible to bulk deliver each state's quota of Journal and then have the Journals posted out by each state at state rates? Frankly I do not know if this would be cheaper, but perhaps someone can put pen to paper and suggest something.

I have right in front of me now the June 1975 Model Railway Constructor, annuan subscription $4.50, including postage, $4.00 overseas; June 1975 Rail way Modeller, by post annual subscription $4.95, $4.65 overseas. In both cases, overseas rates are cheaper than home rates which leads to another problem that concerns us as a group. One of these magazines is bulked to Australia and posted out here, the postage on the June issue is 33 cents which will probably now be 50 cents or more, that is $6 per year postage, which is very little more than the subscription rate which includes postage if ordered direct.

Can anyone suggest how we can absorb these postal rates and keep our business here locally.

Broughton Boydell

Dear Sir,

I read with interest the description of the Protofour project undertaken by the North Shore Railway Modellers Association as described in the April June issue of the Journal. Stirred on by my friend Peter Betts I would like to make a few comments about the project.

Let me say at the start that, as a beginner, I have been thoroughly confused by the proliferation of scales and gauges in the hobby. As a result I would question the need to model in a restricted system which seems to offer little advantage over the traditional 00 system, and only helps to perpetrate the confusion which exists with scale and gauges.

Secondly, there seems to be little advantage to changing extremes in technical excellence when they can never be achieved. There is no way in the world that fully prototypical operation is going to be achieved in this scale as steam operation is not possible, and the writer admits that tolerances are much greater than allowed prototypically. As to smooth operation surely there are well constructed 00 layouts around which do operate smoothly and well. I have been most impressed by Peter Betts' own layout which seems to suffer few maladies.

Finally, I would like to express my concern for beginners in such a situation where they are most likely modelling in one of the other "less" prototypical but more traditional gauges. How do they participate?

Paul Fail.

The Editor,
AMRA Journal.

Dear Sir,

Following my decision to move to Western Australia, I have reluctantly resigned from the Federal C.O.M.

During my term of office as Federal Vice-President, I was in the fortunate position to be able to travel to Queensland, Victoria, Sth. Aust. and West Aust. meeting the officers and members of branches and sub-branches in these states.

Through the Journal I would like to thank one and all that I had the pleasure of meeting for their hospitality and courtesy received at all times.

In conclusion, I would like to urge members to take an active part in your Association, either at state or federal levels. It can be a most rewarding experience.

Keith J. Wilcox.

SUCH IS THE LOT OF AN OUT-OF-STATE RAILFAN

I had always thought of New South Wales as a really civilised sort of place as far as railways are concerned. You know the sort of thing - over 6000 route miles of track, steam hauled freight train mileage of 364,365 two years ago, a diversity of motive power something over 500 locos and so on.

To a native of South Australia, where the railways are not regarded very highly, where finance has been withheld and used to provide vote-catching handouts at the S.A.R.'s expense, N.S.W. ranked almost as a paradise when I spent 1½ weeks holiday there in December last year.

This awed respect and admiration for the NSWPTC, and envy of those of you who live in N.S.W. was practically unlimited just as we arrived at Parkes. You see, as we pulled up at where we were spending the night, I saw about a mile (sorry, 1.6km) away to the west, in the golden sky of early evening, a plume of beaut black smoke which could only come from a STEAM LOCO. All sorts of ideas came to mind......Of course! Wasn't N.S.W. the one state where STEAM LOCOS still ran in revenue service? Weren't there still a few 38's, 32's, r0's, 52's etc around? Hadn't Bill Mundie, an ABC announcer and steam fan shifted from Adelaide to N.S.W. partly because of the continued use of steam-power? Yes - everything fitted together. It couldn't be anything but a STEAM LOCO.

Anticipating a great sight and hardly being able to believe my luck, I grabbed the camera, and soft talked my father into driving me. So I set off to find, identify and photograph the STEAM LOCO. We got closer and closer to the railway line and the fantastic STEAM LOCO, but a series of wrong turns delayed the discovery.

At last we were on the right road - the STEAM LOCO should be at the end of this "rainbow" of a road. But there was only hearbreak, disappointment, and despair there. My STEAM LOCO wasn't there! And it hadn't steamed off. My "loco" was, wait for it, a lousy old BRICK KILN.

Next day I left Parkes 16 hours older and a lot, lot wiser.

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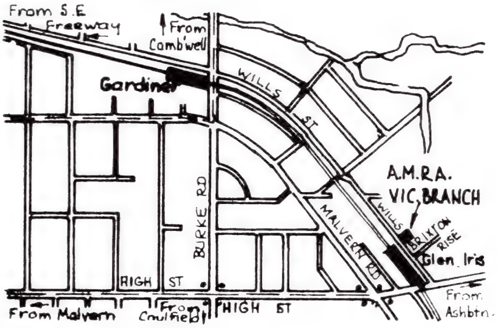
BRANCH NOTES



VICTORIAN BRANCH

Club meetings are held on the second Thursday of each month at 92 Wills St. Glen Iris, commencing at 8 p.m. The clubrooms are open at 7.30 p.m. (not 7 p.m. as previously advised), on these nights for operation of your HO train on the club layout. Working bees including some operation on the club layout are held on Wednesday nights with the exception of the Wednesday before the monthly meeting.

Scratch builders meet the first Wednesday at the clubrooms and the current project is a V.R. somersault signal.

The Committee of Management were sorry to lose the services of Rex Little who regretfully had to relinguish his position on the committee due to private committments. Fortunately Rex had indicated he will be able to continue maintenance and refurbishing of the club layouts. Ray Brownbill was elected to fill the vacancy on the committee and his contacts in the building trade will be an assett.

The Mini Exhibition under the direction of Stuart Hay, held at the clubrooms in August was a success and gave the Ivanhoe sub branch an opportunity to try out their new "N" gauge layout under exhibition conditions. This layout will be featured in the Moomba Exhibition as a fully automatic six train mainline and rack railway. Whilst on the subject of exhibitions we still need volunteers to staff the "Big One". If you will be in Melbourne over the weekend 5th08th March and would like to assist, please contact the writer or the Exhibition Organiser, Jim Scott.

On the social side the night at the Swagman Restaurant, organised by the Ladies' Auxilary was voted one of our most successful nights, and the eleven couples who attended had a very enjoyable evening. The train trip to Linton on the Skipton line promises to be a success with all seats being sold, and organiser John Hutchinson has arranged for handouts, giving a brief description of historical landmarks to be seen from the windows of our railcar.

The agenda for the next three months is as follows:

Nov. 1st	Crazy Whist at clubrooms at 8 p.m.
Nov. 13th	Multiple item clinic. Competition - photo box or louvre van.
Dec. 6th	Crazy Whist at clubrooms at 8 p.m.
Dec. 11th	Presentation night -operation on club layouts. Competition a. Construction - Bob Edwards Trophy for best of years competition models. b. Photographic - Malvue Trophy for best of winning entries in years competition.
Jan. 8th	Running night on club layouts. No formal meeting.
Feb. 12th	Film Night - Bill Secker. Competition - Lineside Structure.

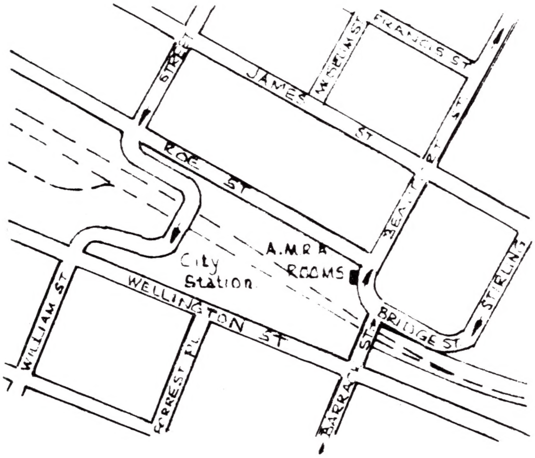
The July-December issue of Journal was handed to members at our July meeting and amongst the visitors that night was Neil Richies, author of the 1958 reprinted article "Colac to Beech Forest". Needless to say Neil was pleasantly surprised to see his article in a modern Journal, and took little prompting to rejoin the Association. One can but wonder how many other ex members may still be interested in our hobby and could be welcomed back to the ranks.

John J. Harry Hon. Sec.
68 Lahona Avenue.
Bentleigh, 3165.

Ladies Auxilary.

At a meeting held on 26th August, at the home of Joan Westerman the Ladies' Auxilary was wound up after 2½ years of operation. Accordingly there will be no future functions organised by the ladies including the Christmas Party which was listed for 13th December.

WESTERN AUSTRALIAN BRANCH NOTES

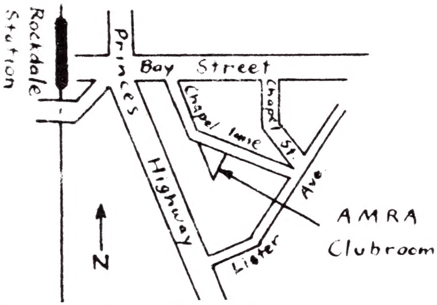


Club night meetings are held in the Clubroom, 1 Beaufort St., Perth, on the FIRST Monday of each Month. Working Bees on the layout are held on the two Saturdays per month as indicated on your quarterly programme.

Visitors and prospective members of A.M.R.A. are always welcome at any of our meetings. Anyone interested can write or phone the Secretary for further information: —

Mr. Jack Eagles,
26 Swan Road,
High Wycombe, W.A. 6057.
Phone: 60 5005

NEW SOUTH WALES BRANCH NOTES



Program November '75 to February '76:

November.

Sat.	1st	Discussion on point and track construction.
Mon.	3rd	Annual Dinner. To be held at a restaurant or club, watch notice board for details.
Fri.	14th	Layout operation - Seniors only.
Sat.	15th	Auction. (All goods must be presented by 2.20 p.m.
Fri.	21st	Federal Annual General Meeting, to be followed by a slide night.

December.

Sat.	6th	Open Day. Visit by other clubs. Operating layouts.
Fri.	12th	Layout operation - Seniors only.
Sat.	20th	Christmas Barbeque at the clubroom. Bring the children to see Santa Claus. Fires will be lit at 3.15 p.m. so bring your meat.

January.

Fri.	24th	Layout Operation.

February.

Sat.	7th	Annual General Meeting. Please attend.
Fri.	13th	Layout operation - Seniors only.
Sat.	21st	Auction. (All goods must be presented by 2.20 p.m.
Fri.	27th	Layout operation. N.S.W. prototype only.

Meetings, unless otherwise specified, start at:

Friday	7.30 p.m. to 11.00 p.m.
Saturdays	2.00 p.m. to 5.30 p.m.

Please assist the duty officer and depart at these times.

QUEENSLAND.

The June meeting, hosted by Arthur Robinson, was the annual election of officers, followed by a wide ranging discussion of branch activities and finances. Elected officers are:

President	Eric Lyon
Vice President	Arthur Robinson
Secretary	Malcolm Neilsen
Treasurer	Roger Kershaw
Assist. Treasurer	Arthur Hayes
Country/Overseas Correspondant	Jim Bilby
Reporter	Jim Christie

Jim Fainges declined re-nomination as Vice President and we thank him for all his past efforts. Roger Kershaw is being transferred to foreign parts, (Melbourne) at the end of the year. His position will be assumed by Arthur Hayes, who already shows the eagerness of his predecessor in extracting money from members.

Steve Suggitt, at the July meeting screened a varied selection of colour slides taken on his travels in many parts of the world. During August Steve Malone spoke on his methods of loco construction and showed colour films of ARHS steam tours. Also during the month a party of members and families travelled to Lowood for a barbecue lunch and to visit the Corcutts at Lockrose. An unexpected and appreciated side tour was an inspection of the Lowood foundry. John Corcutt and his father operate an extensive 00 layout based on British practice. Mrs. Corcutt seems to be engaged in a losing battle against an expanding railway empire.

The annual auction at Clayfield was again a success, even though the goods offered for sale and the numbers attending were not as great as the previous year. We were fortunate that our auctioneer Eric Lyon was able to bring proceedings to a close before rain which had been threatening all afternoon began to fall. Largest item ever offered was a 8 x 4 baseboard with track. Quite a few good items were knocked down at bargain prices.

It is anticipated that a Christmas Party, barbecue and model competition will be held before the end of the year. Information regarding this function can be had from branch officers.

The visits to members homes during the past year have been most enjoyable, but the lack of clubrooms is a continuing frustration to the branch activities. The major drawback is this lack of suitable premises where the club layout can be permanently erected and put to full use. Arthur and Pat Robinson have allowed it to be set up at their house, but their hospitality cannot be imposed upon indefinitely. Hopefully, the new year will bring better prospects.

The branch officers wish all members in Queensland and interstate, a Merry Christmas and a Happy New Year.

Jim Christie.
Branch Reporter.

SOUTH AUSTRALIAN BRANCH

Although the South Australian Branch is not yet formed, the S.A. Representative is Wal Bennett, 6/42 Wright Street, Renown Park, Adelaide, 5008.

MERITORIOUS AWARDS.

Ivo Bunker
Bob Gorrell
Alan Dowel
Stephen Suggitt
Rex Little
Norm Read
Jack Treseder
Mal Baker
John Sneddon
John Dunn
Graham Larmour
Ken Down
David Ellis
Arthur Robinson
Bruce Lovett

NEWS FROM OTHER CLUBS

PROSPECT MODEL RAILWAY CLUB.

The annual general meeting of the club was held on 26/7/75. The elected officers for 1975 are:

President	Brian Webb
Secretary	Phil McDonnell
Treasurer	Bob Payk
Committeemen	Warren Austin, Greg Archer

For the coming year we are going to have 6 general meetings instead of 3 as we had last year. The members felt that with only three meetings a year everybody did not get enough time to air their views on club matters.

We have commenced the extensions to our existing 24' by 8' HO gauge club layout. When completed the layout will occupy 2/3rds of the 30' by 30' club room. The extensions will include a four track passenger terminal accomodating nine foot long trains and loco facilities, a 24' long divisional yard with loco facilities, a sea port with coal unloading wharf and a mountain division with a 4 per cent grade and a helper service.

When completed the layout may be operated by up to 12 operators at one time. We plan to have the extensions completed with 18 months.

Club meeting nights are the 2nd and 4th Saturdays in each month at 8 p.m. New members and visitors are welcome. Contact Bob Payk at 31 Adelaide Street, St. Marys, 2760, N.S.W. or phone Sydney 623-1855 or 644-6219 for information.

P. McDonnell
Hon. Sec

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NORTH SHORE RAILWAY MODELLERS' ASSOC.

This Association held its 4th Annual Model Railway Exhibition on 2nd and 3rd August, at the Castlecrag scout hall.

The main club exhibit consisted of a large static display of locomotives, rolling stock and buildings, all being the work of club members. The items of this display were arranged so that different railway companies were featured in their own collective group. Such a display is a common sight at many overseas exhibitions, but seldom seen in this country.

Other displays of club members included "HO" layouts of Peter Moses and Reg McCord, each of which featured NSW prototypes. These two layouts were different in that Peter's was completely dieselised, while Reg's was predominately steam.

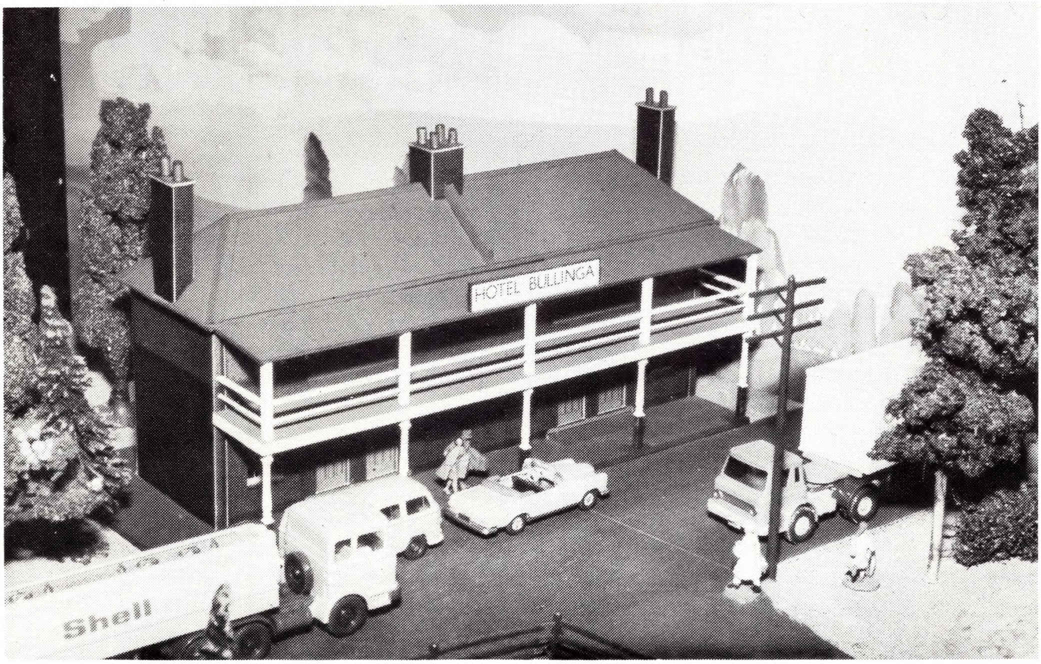
Two husband and wife teams featured in other exhibits. Sue and Peter Betts displayed a narrow gauge "009" layout which when finished will be built into a coffee table; and Gill and Doug Bocking displayed a new series of rolling stock body kits which they are marketing under the name of "Workshop 5". These kits fill a much needed gap in the commercial field, for they are of really high quality and yet not expensive.

The Junior Section of the club displayed a "00" gauge layout owned by Mark Neal, based mainly on Hornby trains and other exhibits associated with the host club were Kevin Loughry's display of two small "N" gauge layouts and the layout of the "Southern Railway Modellers". The latter is a combination by Peter Betts and Phil Knife on Peter's layout.

The exhibition was completed by the Stratfield-Burwood Model Railway Club's ever popular layout; a display of working stationary steam engines and an "N" gauge layout of the Hornsby and District Model Engineering Society; and last but not least, a section devoted to the sale and exchange of second hand goods.

Every exhibition has a different atmosphere, the unusual feature of this one being the high proportion of railway enthusiastic adults that attended.

Peter Betts.
Hon. Sec.



The Hotel Bullinga on the HO layout of the Hurstville Model Railway Club at the AMRA Sydney Exhibition. The hotel is a conversion of a Superquick kit. Following the method described in an article in AMRA Journal of May/June 1973.
Photo - Alan Templeman.

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